0420
0360

OIPE

#3

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/997,807

DATE: 12/07/2001
TIME: 12:41:21

Input Set : A:\Seqlist.txt
Output Set: N:\CRF3\12072001\I997807.raw

ENTERED

```
 4 <110> APPLICANT: Jay Short
 5       Eric J. Mathur
 6       W. Michael Lafferty
 7       Nelson Barton
 8       Kevin Chow
10 <120> TITLE OF INVENTION: Method of Making A Protein Polymer and
11       Uses of the Polymer
13 <130> FILE REFERENCE: DVSA-1005US
C--> 15 <140> CURRENT APPLICATION NUMBER: US/09/997,807
C--> 15 <141> CURRENT FILING DATE: 2001-11-30
15 <150> PRIOR APPLICATION NUMBER: 60/250,426
16 <151> PRIOR FILING DATE: 2000-11-30
18 <160> NUMBER OF SEQ ID NOS: 10
20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 624
24 <212> TYPE: DNA
25 <213> ORGANISM: Pyrodictium abyssi
27 <400> SEQUENCE: 1
28 gtgaagtaca caaccctagc tatagcgggt attattgcct cggctgccgc cctcgccctc 60
29 ctagcaggct tcgccaccac ccagagcccc ctcaacagct tctacgccac cggtacagca 120
30 caggcagtaa gcgagccaat agacgtagaa agccacctcg gcagcataac ccccgcagcc 180
31 ggcgcacagg gcagtgacga cataggttac gcaatagtgt ggataaagga ccaggtcaat 240
32 gatgtaaagc tgaaggtgac cctgcgtaac gctgagcagc taaagcccta cttcaagtac 300
33 ctacagatac agataacaag cggctatgag acgaacagca cagctctagg caacttcagc 360
34 gagaccaagg ctgtgataag cctcgacaac cccagcgccg tgatagtact agacaaggag 420
35 gatatagcag tgctctatcc ggacaagacc ggttacacaa acacttcgat atgggtaccc 480
36 ggtgaacctg acaagataat tgtctacaac gagacaaagc cagtagctat actgaacttc 540
37 aaggccttct acgaggctaa ggagggtatg ctattcgaca gcctgccagt gatattcaac 600
38 ttccaggtgc tacaagtagg ctaa                                       624
40 <210> SEQ ID NO: 2
41 <211> LENGTH: 207
42 <212> TYPE: PRT
43 <213> ORGANISM: Pyrodictium abyssi
45 <400> SEQUENCE: 2
46 Val Lys Tyr Thr Thr Leu Ala Ile Ala Gly Ile Ile Ala Ser Ala Ala
47  1               5                  10                  15
48 Ala Leu Ala Leu Leu Ala Gly Phe Ala Thr Thr Gln Ser Pro Leu Asn
49             20                  25                  30
50 Ser Phe Tyr Ala Thr Gly Thr Ala Gln Ala Val Ser Glu Pro Ile Asp
51         35                  40                  45
52 Val Glu Ser His Leu Gly Ser Ile Thr Pro Ala Ala Gly Ala Gln Gly
53     50                  55                  60
54 Ser Asp Asp Ile Gly Tyr Ala Ile Val Trp Ile Lys Asp Gln Val Asn
55 65                  70                  75                  80
56 Asp Val Lys Leu Lys Val Thr Leu Arg Asn Ala Glu Gln Leu Lys Pro
57                 85                  90                  95
```

RAW SEQUENCE LISTING DATE: 12/07/2001
PATENT APPLICATION: US/09/997,807 TIME: 12:41:21

Input Set : A:\Seqlist.txt
Output Set: N:\CRF3\12072001\I997807.raw

```
Tyr Phe Lys Tyr Leu Gln Ile Gln Ile Thr Ser Gly Tyr Glu Thr Asn
            100                 105                 110
Ser Thr Ala Leu Gly Asn Phe Ser Glu Thr Lys Ala Val Ile Ser Leu
        115                 120                 125
Asp Asn Pro Ser Ala Val Ile Val Leu Asp Lys Glu Asp Ile Ala Val
    130                 135                 140
Leu Tyr Pro Asp Lys Thr Gly Tyr Thr Asn Thr Ser Ile Trp Val Pro
145                 150                 155                 160
Gly Glu Pro Asp Lys Ile Ile Val Tyr Asn Glu Thr Lys Pro Val Ala
                165                 170                 175
Ile Leu Asn Phe Lys Ala Phe Tyr Glu Ala Lys Glu Gly Met Leu Phe
            180                 185                 190
Asp Ser Leu Pro Val Ile Phe Asn Phe Gln Val Leu Gln Val Gly
        195                 200                 205
<210> SEQ ID NO: 3
<211> LENGTH: 513
<212> TYPE: DNA
<213> ORGANISM: Pyrodictium abyssi
<400> SEQUENCE: 3
gtgaagccta cggctctagc cctggctggt atcattgcct cggctgccga cctcgccctg 60
ctagcaggct tcgccaccac ccagagcccg ctcaacagct tctacgccac cggcacagca 120
gccgcaacaa gcgagccaat agacgtagag agccacctca gcagcatagc ccctgctgct 180
ggcgcacagg gcagccagga cataggctac ttcaacgtga ccgccaagga tcaagtgaac 240
gtgacaaaga taaaggtgac cctggctaac gctgagcagc taaagcccta cttcaagtac 300
ctacagatag tgctaaagag cgaggtagct gacgagatca aggccgtaat aagcatagac 360
aagcctagcg ccgtcataat actagacagc caggacttcg acagcaacaa cagagcaaag 420
ataagcgcca ctgcctacta cgaggctaag gagggcatgc tattcgacag cctaccgcta 480
atattcaaca tacaggtgct aagcgtcagc taa                               513
<210> SEQ ID NO: 4
<211> LENGTH: 170
<212> TYPE: PRT
<213> ORGANISM: Pyrodictium abyssi
<400> SEQUENCE: 4
Val Lys Pro Thr Ala Leu Ala Leu Ala Gly Ile Ile Ala Ser Ala Ala
 1               5                  10                  15
Asp Leu Ala Leu Leu Ala Gly Phe Ala Thr Thr Gln Ser Pro Leu Asn
            20                  25                  30
Ser Phe Tyr Ala Thr Gly Thr Ala Ala Ala Thr Ser Glu Pro Ile Asp
        35                  40                  45
Val Glu Ser His Leu Ser Ser Ile Ala Pro Ala Ala Gly Ala Gln Gly
    50                  55                  60
Ser Gln Asp Ile Gly Tyr Phe Asn Val Thr Ala Lys Asp Gln Val Asn
65                  70                  75                  80
Val Thr Lys Ile Lys Val Thr Leu Ala Asn Ala Glu Gln Leu Lys Pro
                85                  90                  95
Tyr Phe Lys Tyr Leu Gln Ile Val Leu Lys Ser Glu Val Ala Asp Glu
            100                 105                 110
Ile Lys Ala Val Ile Ser Ile Asp Lys Pro Ser Ala Val Ile Ile Leu
        115                 120                 125
```

RAW SEQUENCE LISTING DATE: 12/07/2001
PATENT APPLICATION: US/09/997,807 TIME: 12:41:21

Input Set : A:\Seqlist.txt
Output Set: N:\CRF3\12072001\I997807.raw

```
112 Asp Ser Gln Asp Phe Asp Ser Asn Asn Arg Ala Lys Ile Ser Ala Thr
113     130                 135                 140
114 Ala Tyr Tyr Glu Ala Lys Glu Gly Met Leu Phe Asp Ser Leu Pro Leu
115 145                 150                 155                 160
116 Ile Phe Asn Ile Gln Val Leu Ser Val Ser
117                 165                 170
120 <210> SEQ ID NO: 5
121 <211> LENGTH: 537
122 <212> TYPE: DNA
123 <213> ORGANISM: Pyrodictium abyssi
125 <400> SEQUENCE: 5
126 atgaggtaca cgaccctagc tctggccggc atagtggcct cggctgccgc cctcgccctg 60
127 ctagcaggct tcgccacgac ccagagcccg ctaagcagct tctacgccac cggcacagca 120
128 caagcagtaa gcgagccaat agacgtagag agccacctag acaacaccat agcccctgct 180
129 gccggtgcac agggctacaa ggacatgggc tacattaaga taactaacca gtcaaaagtt 240
130 aatgtaataa agctgaaggt gactctcgct aacgccgagc agctaaagcc ctacttcgac 300
131 tacctacagc tagtactcac aagcaacgcc actggcaccg acatggttaa ggctgtgcta 360
132 agcctcgaga agcctagcgc agtcataata ctagacaacg atgactacga tagcactaac 420
133 aagatacagc taaaggtaga agcctactat gaggctaagg agggcatgct attcgacagc 480
134 ctaccagtaa tactgaactt ccaggtactg agcgccgctt gcagtccctt gtggtga    537
136 <210> SEQ ID NO: 6
137 <211> LENGTH: 178
138 <212> TYPE: PRT
139 <213> ORGANISM: Pyrodictium abyssi
141 <400> SEQUENCE: 6
142 Met Arg Tyr Thr Thr Leu Ala Leu Ala Gly Ile Val Ala Ser Ala Ala
143  1               5                  10                  15
144 Ala Leu Ala Leu Leu Ala Gly Phe Ala Thr Thr Gln Ser Pro Leu Ser
145             20                  25                  30
146 Ser Phe Tyr Ala Thr Gly Thr Ala Gln Ala Val Ser Glu Pro Ile Asp
147         35                  40                  45
148 Val Glu Ser His Leu Asp Asn Thr Ile Ala Pro Ala Ala Gly Ala Gln
149     50                  55                  60
150 Gly Tyr Lys Asp Met Gly Tyr Ile Lys Ile Thr Asn Gln Ser Lys Val
151 65                  70                  75                  80
152 Asn Val Ile Lys Leu Lys Val Thr Leu Ala Asn Ala Glu Gln Leu Lys
153                 85                  90                  95
154 Pro Tyr Phe Asp Tyr Leu Gln Leu Val Leu Thr Ser Asn Ala Thr Gly
155             100                 105                 110
156 Thr Asp Met Val Lys Ala Val Leu Ser Leu Glu Lys Pro Ser Ala Val
157         115                 120                 125
158 Ile Ile Leu Asp Asn Asp Asp Tyr Asp Ser Thr Asn Lys Ile Gln Leu
159     130                 135                 140
160 Lys Val Glu Ala Tyr Tyr Glu Ala Lys Glu Gly Met Leu Phe Asp Ser
161 145                 150                 155                 160
162 Leu Pro Val Ile Leu Asn Phe Gln Val Leu Ser Ala Ala Cys Ser Pro
163                 165                 170                 175
164 Leu Trp
168 <210> SEQ ID NO: 7
```

RAW SEQUENCE LISTING DATE: 12/07/2001
PATENT APPLICATION: US/09/997,807 TIME: 12:41:21

Input Set : A:\Seqlist.txt
Output Set: N:\CRF3\12072001\I997807.raw

<211> LENGTH: 311
<212> TYPE: DNA
<213> ORGANISM: Pyrodictium abyssi
<400> SEQUENCE: 7
agcttctacg ccaccggcac agcacaggca gtaagcgagc caatagacgt ggtaagcagc 60
ctcggtacgc taaatactgc cgctggtgca cagggtaagc agacgctagg agacataaca 120
atatatgcgc acaatgacgt gaacataaca aagctaaagg tcacgcttgc taacgctgca 180
cagctaagac catacttcaa gtacctgata ataaagctag taagcctgga cagcaacggc 240
aacgagtccg aggaaaaggg catgataact ctatggaagc cttacgccgt gataatacta 300
gaccatgaag a 311
<210> SEQ ID NO: 8
<211> LENGTH: 130
<212> TYPE: PRT
<213> ORGANISM: Pyrodictium abyssi
<400> SEQUENCE: 8

Ser	Phe	Tyr	Ala	Thr	Gly	Thr	Ala	Gln	Ala	Val	Ser	Glu	Pro	Ile	Asp
1				5				10					15		
Val	Val	Ser	Ser	Leu	Gly	Thr	Leu	Asn	Thr	Ala	Ala	Gly	Ala	Gln	Gly
		20					25					30			
Lys	Gln	Thr	Leu	Gly	Asp	Ile	Thr	Ile	Tyr	Ala	His	Asn	Asp	Val	Asn
	35					40					45				
Ile	Thr	Lys	Leu	Lys	Val	Thr	Leu	Ala	Asn	Ala	Ala	Gln	Leu	Arg	Pro
	50				55					60					
Tyr	Phe	Lys	Tyr	Leu	Ile	Ile	Lys	Leu	Val	Ser	Leu	Asp	Ser	Asn	Gly
65				70					75					80	
Asn	Glu	Ser	Glu	Glu	Lys	Gly	Met	Ile	Thr	Leu	Trp	Lys	Pro	Tyr	Ala
			85					90					95		
Val	Ile	Ile	Leu	Asp	His	Glu	Asp	Phe	Asn	Asn	Asp	Ile	Asp	Gly	Asp
		100					105					110			
Asn	Gln	Cys	Gln	Ile	Asp	Ala	Thr	Ala	Tyr	Tyr	Glu	Ala	Lys	Glu	Gly
	115					120					125				
Met	Leu														
	130														

<210> SEQ ID NO: 9
<211> LENGTH: 372
<212> TYPE: DNA
<213> ORGANISM: Pyrodictium abyssi
<400> SEQUENCE: 9
agcttctacg ccaccggcac agcagaggca acaagcgagc caatagacgt tgtaagcaac 60
cttaacacgg ccatagcccc tgctgccggc gcccagggca gcgtgggcat aggcagcata 120
acaatagaga acaagactga cgtgaacgtt gtgaagctga agataaccct cgccaacgct 180
gagcagctaa agccctactt cgactaccta cagatagtgc taaagagcgt tgacagcaac 240
gagatcaagg ctgtgctaag cctcgagaag cccagcgcag tcataatact ggacaacgag 300
gacttccagg gcggcgacaa ccagtgccag atagacgcca ccgcctacta cgaggctaag 360
gagggtatgc ta 372
<210> SEQ ID NO: 10
<211> LENGTH: 124
<212> TYPE: PRT
<213> ORGANISM: Pyrodictium abyssi

RAW SEQUENCE LISTING DATE: 12/07/2001
PATENT APPLICATION: US/09/997,807 TIME: 12:41:21

Input Set : A:\Seqlist.txt
Output Set: N:\CRF3\12072001\I997807.raw

```
226 <400> SEQUENCE: 10
227 Ser Phe Tyr Ala Thr Gly Thr Ala Glu Ala Thr Ser Glu Pro Ile Asp
228  1               5                  10                  15
229 Val Val Ser Asn Leu Asn Thr Ala Ile Ala Pro Ala Ala Gly Ala Gln
230             20                  25                  30
231 Gly Ser Val Gly Ile Gly Ser Ile Thr Ile Glu Asn Lys Thr Asp Val
232         35                  40                  45
233 Asn Val Val Lys Leu Lys Ile Thr Leu Ala Asn Ala Glu Gln Leu Lys
234     50                  55                  60
235 Pro Tyr Phe Asp Tyr Leu Gln Ile Val Leu Lys Ser Val Asp Ser Asn
236 65                  70                  75                  80
237 Glu Ile Lys Ala Val Leu Ser Leu Glu Lys Pro Ser Ala Val Ile Ile
238                 85                  90                  95
239 Leu Asp Asn Glu Asp Phe Gln Gly Gly Asp Asn Gln Cys Gln Ile Asp
240             100                 105                 110
241 Ala Thr Ala Tyr Tyr Glu Ala Lys Glu Gly Met Leu
242         115                 120
```

VERIFICATION SUMMARY DATE: 12/07/2001
PATENT APPLICATION: US/09/997,807 TIME: 12:41:22

Input Set : A:\Seqlist.txt
Output Set: N:\CRF3\12072001\I997807.raw

L:15 M:270 C: Current Application Number differs, Replaced Current Application No
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date